APPENDIX E – SAMPLE STATEMENT OF WORK

CONSULTING SERVICES FOR AN EXPERT IN DECISION SCIENCE IN PREPARATION OF DRAFT RESEARCH PLAN NEEDED BY SAB/EPA WORKSHOP "UNDERSTANDING PUBLIC VALUES AND ATTITUDES RELATED TO ECOLOGICAL RISK MANAGEMENT"

STATEMENT OF WORK

Background

EPA is seeking to identify research and methods that could improve the capability of the Agency and other partners in environmental protection in understanding the values and attitudes towards protection of specific ecological resources at risk. It is seeking to identify research and methods that supplement or complement current methods for characterizing benefits associated with protecting ecological resources**.** In August 2000, EPA's Science Advisory Board (SAB) called for a workshop to "explore the topic of natural resource valuation more fully."[1] The SAB is collaborating with several other offices at EPA (Office of Policy, Economics and Innovation, Office of Water, Office of Air and Radiation, and the Office of Research and Development) to sponsor a workshop to focus on deposition of nitrogen by air to Tampa Bay Estuary. The Workshop is entitled "SAB/EPA Workshop on "Understanding Public Values and Attitudes Related to Ecological Risk Management."

The purpose of the workshop is to provide a forum for researchers in the social sciences to address the following questions:

Given that the state of knowledge about ecological and human health effects of nitrogen deposition are fairly well known in the Tampa Bay Estuary, EPA seeks answers to the following questions, in terms that are relevant to and readily comprehendible to Agency management:

A.Why do people care about protecting this water body, addressing current problems and preventing further nitrogen deposition?

B.How can we develop a fuller suite of methods to identify and evaluate/measure why and how much people care about protecting this water body?

The Workshop will center on several Research Proposals developed to highlight different approaches in the social sciences to understanding values and attitudes associated with protection of Tampa Bay against nitrogen deposition. The Workshop will also include a panel of risk managers who will be asked to comment on the Research Proposals presented. They will be asked to discuss how the kinds of research described might help them make decisions, communicate decisions, and justify decisions taken, both in the context of issues immediate to Tampa Bay and those associated with protection of ecological resources more generally.

---

[1] *Toward Integrated Environmental Decision-Making*, August 2000, EPA-SAB-EC-00-011.

Appendix A contains information on: (1) risk management questions faced by decision makers concerned about air deposition to Tampa Bay, and (2) questions raised by the Tampa Bay experience for others decision makers concerned with protecting ecological resources.

Scope of Work:

The EPA requires a Research Proposal focusing on the application of decision science for use in a workshop. The primary task of this consultant shall be to develop a written proposal demonstrating how specific research applying approaches in decision science could help decision makers understand values and attitudes related to protection of Tampa Bay against nitrogen deposition. The expert shall also make a presentation of no more than 45 minutes in length at the Workshop on May 23-24, 2001 in Washington, D.C., summarizing the research proposal, answering questions about the Research Proposal, and participating in discussions during the 2-day workshop. The consultant shall be responsible for making travel reservations for hotel and local transportation (all travel costs reimbursable under the Purchase Order). The Research Proposal will be included in the report of the Workshop, along with documentation of the workshop discussions.

Delineation of Tasks:

Task 1. The consultant shall sign a conflict-of-interest form certifying that he/she has no known conflict of interest in performing the review.

Task 2. The consultant shall participate in the conference call with experts from Tampa Bay to address the consultant's questions regarding the background information provided. Conference call to be scheduled at a time convenient for all consultants involved in the Workshop and Tampa Bay personnel. Consultant to identify questions to be addressed in conference call to the EPA Project Officer by February 9, 2000**.**

Task 3. By April 15, 2000, the consultant shall prepare and deliver to the Project Officer a Research Plan. In preparing the Research Plan, use plain English and avoid jargon that is specific to your own discipline. For acronyms, spell out the term the first time it is used, with the appropriate abbreviation in parentheses; the abbreviation may be used thereafter. The Research Plan will include the following elements:

(a)Title of Project;

(b)Executive Summary: (1) What do you intend to do? (2) Why is the work important? (3) What has already been done? (4) How are you going to do the work? Two pages are recommended;

(c) Specific Aims. List the broad, long-term objectives and what the specific research proposed in this application is intended to accomplish. State the hypotheses to be tested or major question to be addressed. One page is recommended;

(d)Background and Significance. Briefly sketch the background leading to the present Research Proposal, critically evaluate existing knowledge, and specifically identify the gaps which the project is

intended to fill. State concisely the importance and relevance of the research described by relating the specific aims to the broad, long-term objectives. Two to three pages are recommended;

(e)Research Design and Methods. Describe the research design and the procedures to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted. Describe the methodology and its advantage over existing methodologies. Discuss the potential difficulties and limitations of the proposed procedures and possible alternative approaches to achieve the aims. As part of this section, provide a tentative sequence or timetable for the project. Twenty pages or less are recommended;

(f)Background on Related Research. Use this section to provide an account of related studies pertinent to the application information that will help to establish the appropriateness and utility of proposed project. This section may include description of where research of this kind has been used in decision making regarding ecological resources in the past. This description would include: (i) How was the resource valued?; (ii) How was the cost of control valued?; (iii) How was data used to reach a decision on restoration of the resource? Five pages are recommended. The complete references to appropriate publications may be listed and are not subject to page limitations;

(g)Literature Cited. List all references. The list may include, but may not replace, the list of publications identified in the "Background on Related Research." Each reference must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. The reference should be limited to relevant and current literature;

(h)Dates of Proposed Period of Support and Proposed Costs. Identify the proposed start date for the research and period of proposed research. By year and for the entire proposed period of support, itemize the following budget categories:

(i)Personnel costs. The titles of all persons who are involved on the project. Include all collaborating investigators, individuals in training, and support staff. Identify the role of each individual listed on the project. For each individual, list the percent of each appointment to be spent on this project. Enter the dollar amounts for each position for which funds are requested. The salary requested is calculated by multiplying the individual's institutional base salary by the percent of effort on this project.

(ii)Cost of supplies. Itemize any supplies costing more than $1,000.

(iii)Travel. Provide the purpose and destination of each trip and the number of individuals for whom funds are requested.

(iv)Other expenses by category and unit cost. These might publication costs, computer charges, rentals and leases, equipment maintenance, or service contracts.

(i)Budget for Entire Proposed Period of Support. Provide a table summarizing the totals under each budget for each year and for the entire proposed period of support.

One month before the consultant delivers the Research Plan, the consultant shall provide the Project Officer with the names and institutional addresses of two independent peer reviewers that the consultant shall identify as having requisite disciplinary expertise to review the Research Plan. The Project Officer will, with the assistance of consultants from the EPA Science Advisory Board, approve those peer reviewers.

At the time the consultant delivers the Research Plan, the consultant shall also deliver to the Project

Officer the text of peer reviews conducted by 2 independent peer reviewers approved by the Project Officer along with Conflict of Interest forms completed by the peer reviewers. At that time, the consultant shall also provide a memorandum to the Project Officer explaining either how any deficiencies found by the peer reviewers were addressed in the Research Plan delivered to the Project Officer or why they weren't addressed.

The consultant shall provide two paper copies and one electronic copy (Word Perfect 8) of the Research Plan to the Project Officer. The Project Officer will make the Research Plan available to participants in the Workshop through distribution of hard copy, email, and through the EPA/SAB website.

Task 4. The consultant shall prepare and deliver a 45-minute presentation in language that a non-expert would understands on the research plan at the Workshop. The consultant shall also participate in the entire workshop to answer questions from Agency staff and managers, SAB members and other members of the public. The consultant shall make paper and electronic copies of slides or handouts available to the Technical Project Officer at the time of the Workshop.

Deliverables

1)Names of 2 expert peer reviewers and their institutional Address	March 15, 2001
2)Research Plan	April 15, 2001
3)Two independent peer reviews of the Research Plan and Memorandum to the Technical Project Officer addressing peer review comments	April 15, 2001
4)Any slides or handouts used at the Workshop	May 23-24, 2001

Government Furnished Property/Materials (Information)

As background to the expert for generation of the Research Proposal, the EPA Project Officer will provide the following:

1.background material on EPA's current methods for characterizing benefits associated with protecting ecological resources

a.*Framework for the Economic Assessment of Ecological Benefits*, draft July 1998

b.*Assessing the Economic Value of Estuary Resources and Resource Services in CCMP Planning and Implementation; A National Estuary Program Environmental Valuation Handbook*, draft July 2000

2.information (Appendix A) on: (1) risk management questions faced by decision makers concerned about air deposition to Tampa Bay, and (2) questions raised by Tampa Bay experience for others decision makers concerned with protecting ecological resources

3.current documentation describing Tampa Bay's goals for controlling nitrogen deposition. Specific documents include:

a.*Tampa Bay Estuary's Comprehensive Conservation and Management Plan*

b.*Partnership for Progress, The Tampa Bay Nitrogen Management Consortium Management Plan*

c.Decision Document for Technical Approval/Disapproval of TMDL Submitted for Tampa Bay, Florida, 1998

d.*Tampa Bay Consortium to "Hold the Line" on Nitrogen Loadings*, Coastlines: 8, Fall 1995.

4.a conference call with experts from Tampa Bay to address researcher's questions regarding the background information provided. Conference call to be scheduled at a time convenient for all researchers and Tampa Bay personnel. Researchers to identify questions to be addressed in conference call to the EPA technical project officer by February 9, 2000.

5.names and contact information for staff at Tampa Bay Estuary Program who are available to take questions related to the Statement of Work outside the scheduled conference call time.

Evaluation Criteria

Factor (1):Demonstrated expertise in contractor's subject discipline, and demonstrated; expertise in applying that discipline to the area of ecological resource protection

Factor (2):Demonstrated ability to conduct research that has made a contribution to policy and decision making;

Factor (3):Demonstrated experience on a wide range of real-life policy issues that indicate ability to apply the contractor's specialized expertise to the "real world" issue of nitrogen deposition in Tampa Bay;

Factor (4):Effective communicators possessing the ability to explain research from their respective discipline to academic specialists from differing disciplines, as well as to risk managers, and to a lay audience.

Factor (5)Reasonable and competitive price.

Attachment A

Appendix A: Risk Management Questions for Workshop

Consultant to provide information about public values and attitudes that will help decision makers make decisions, communicate decisions, and justify decisions related to the questions below:

1.Major risk management questions involving nitrogen deposition facing decision makers at Tampa Bay:

a.As population growth increases, it will become more difficult to meet reduction goals through reductions in storm water or through land use planning. Meeting long-term goals may require reductions from the air (e.g., from motor vehicle emissions, power plants, local and "outside" sources). What are values and attitudes towards reducing emissions from air sources among local interests and affected parties?

b.Local counties are facing decisions involving public transportation as a result of requirement to reduce emission of ozone. The requirement triggered by ozone nonattainment will also have an impact on nitrogen deposition and may reduce deposition of nitrogen. What are the values and attitudes related to reducing air deposition of nitrogen and what are the benefits (monetary, quantitative and/or qualitative) to society from protecting water resources from air deposition from nitrogen that may assist county and state officials making decisions involving public transportation?

c.What are the values and attitudes towards complying with the special cooperative mechanism set for implementing Total Maximum Daily Load (TMDL) for nitrogen for Tampa Bay? (The TMDL does not allocate sources for nitrogen; instead it sets an overall goal for the Bay)

2.Risk management questions raised by the Tampa experience that are of interest to decision makers outside Tampa Bay:

a.What can be known about public values and attitudes towards protection of water resources in Tampa Bay or about benefits (monetary, quantitative and/or qualitative) to society from protecting them that can help explain why there is broad support for restoring sea grasses to 1950's level as a goal?

b.What can be known about public values and attitudes towards protection of water resources in Tampa Bay or towards benefits (monetary, quantitative and/or qualitative) to society from protection of those resources that can help explain why participants are willing to work together for this common goal?

c.What can be known about public values and attitudes towards protection of water resources in Tampa Bay that can help explain why participants' collaboration happened without any formal benefits analysis conducted on Tampa Bay goals?

d.What lessons can be learned from studying public values and attitudes towards airborne deposition of nitrogen and/or protection of water resources in Tampa Bay or benefits (monetary, quantitative and/or qualitative) to society from protection of water resources there that can help inform whether the dynamic at Tampa can be captured at the national level?